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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,937	11/03/2003	Kiyoshi Uchida	10873.818USD1	4352

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MINNEAPOLIS, MN 55402-0903

EXAMINER
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DINH, TAN X

ART UNIT	PAPER NUMBER
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2653

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/699,937	UCHIDA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	TAN X. DINH	2653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-15 is/are allowed.
- 6) ☒ Claim(s) 1,3,4 and 6 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 10/038,189.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/03/2003</u> | 6) <input type="checkbox"/> Other: ____  |

1) This application is a Divisional Application of S/N 10/038,189, filed 10/24/2001 and now is US 6,767,697. Claims 5,7,16-18 have been canceled.

2) Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. S/N 10/038,189, filed on 10/24/2001.

3) The I.D.S filed 10/03/2003 has been considered by the Examiner. However, the Japan and/or foreign document(s), if they have not been written in English, are considered to the extent that could be understood from the English Abstract and the drawings.

Form PTO-1449 or PTO/SB/08 is(are) attached herein.

4) The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested.

MAGNETO-OPTICAL RECORDING MEDIUM FOR USE IN DOMAIN WALL  
DISPLACEMENT DETECTION SYSTEM.

5) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6) This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7) Claims 1,3,4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over HASHIMOTO (6,177,175) and IWATA et al (6,346,322).

HASHIMOTO discloses a method for producing a domain-wall-displacement-detection magneto-optical recording medium as claimed in claim 1 ( see abstract ), comprising the step of (i) forming a first dielectric layer, a recording layer and a second dielectric layer on the substrate in this order ( Fig.1, substrate 11, first dielectric layer 14, recording layer 131-133 and second dielectric layer 12. it is noted that, the laser beam could be positioned on either side of the recording medium ). HASHIMOTO fails to specify the step of initializing the recording layer. IWATA et al from the same or similar field teaches a method for initializing domain-wall-displacement-detection magneto-optical recording medium by

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irradiating the magnetic layer with a light beam, thereby weakening magnetic coupling of the recording layer ( column 9, line 53 to column 10, line 6 ). Since the method as taught by IWATA et al is old and well known, one of ordinary skill in the art at the time of the invention was made would have been motivated to use the initializing step in HASHIMOTO's magneto-optical recording medium in order to weakening magnetic coupling force of the recording layer as claimed.

As to claim 3, it would have been obvious to use NA of 0.65 in HASHIMOTO's magneto-optical recording system since it has been generally recognized in the art for using the numerical aperture between the range of 0.55 to 0.85.

As to claim 4, the tracking servo is inherent in every optical disk recording system for guiding the optical pick up during tracking process.

As to claim 6, Official Notice is taken that heat conductive layer are widely used in the art for conducting the heat generates during irradiating process, and therefore they are old and well known. It would have been obvious to use the old and well known heat conductive layer in magneto-optical recording system such as HASHIMOTO's because, in the absence of any new or unexpected result, selecting of a known material/element based on its suitability for the intended use is deem obvious. In re LESHIN, 125 USPQ 416.

8) Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9) Claims 8-15 are allowed.

10) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure ( See form PTO-892 attached herein ).

Applicant is reminded that in amending in response to a rejection of claims ( if the rejection involves with any applicable arts ), the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objection made. Applicant must also show how the amendments avoid such references and objections. See 37 CFR §1.111(c).

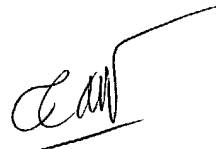
11) Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAN X. DINH whose telephone number is (703) 308-4859. The examiner can normally be reached on Monday - Friday, 8:00AM - 5:30PM.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).



TAN DINH  
PRIMARY EXAMINER

September 3, 2004